

Gennadiy V Sotnikov

List of Publications by Year in descending order

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80
papers

261
citations

1040056

9
h-index

1058476

14
g-index

80
all docs

80
docs citations

80
times ranked

93
citing authors

#	ARTICLE	IF	CITATIONS
1	Structure of electromagnetic field excited by an electron bunch in a semi-infinite dielectric-filled waveguide. <i>Physical Review E</i> , 2002, 65, 066501.	2.1	25
2	Coaxial two-channel high-gradient dielectric wakefield accelerator. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2009, 12, .	1.8	23
3	Space charge limiting current of an electron beam transported in a coaxial drift chamber. <i>Technical Physics</i> , 2002, 47, 535-538.	0.7	16
4	Auto-oscillatory system based on dielectric resonator with whispering-gallery modes. <i>Technical Physics Letters</i> , 2012, 38, 85-88.	0.7	16
5	Analytical and numerical studies of underdense and overdense regimes in plasma-dielectric wakefield accelerators. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2014, 740, 124-129.	1.6	15
6	Comparison of experimental tests and theory for a rectangular two-channel dielectric wakefield accelerator structure. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2012, 15, .	1.8	13
7	Configurations for short period rf undulators. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2013, 16, .	1.8	13
8	Improved ramped bunch train to increase the transformer ratio of a two-channel multimode dielectric wakefield accelerator. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2011, 14, .	1.8	12
9	Limiting current of axisymmetric relativistic charged-particle beam propagating in strong axial magnetic field in coaxial drift tube. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	10
10	Wakefield excitation by a relativistic electron bunch in a magnetized plasma. <i>Plasma Physics Reports</i> , 2000, 26, 889-892.	0.9	9
11	Charged particles accelerated by wake fields in a dielectric resonator with exciting electron bunch channel. <i>Technical Physics Letters</i> , 2003, 29, 589-591.	0.7	9
12	Synchronization of wakefield modes in the dielectric resonator. <i>Technical Physics</i> , 2008, 53, 1344-1349.	0.7	9
13	Dielectric wake-field generator. , 0, , .		8
14	Two-Channel Rectangular Dielectric Wake Field Accelerator Structure Experiment. , 2009, , .		7
15	Excitation of a wake field by a relativistic electron bunch in a semi-infinite dielectric waveguide. <i>Journal of Experimental and Theoretical Physics</i> , 2001, 93, 33-42.	0.9	6
16	Generation of UHF oscillations in slowing down lines with magnetic insulation. , 0, , .		5
17	3D Analysis of Wake Field Excitation in a Dielectric Loaded Rectangular Resonator. <i>AIP Conference Proceedings</i> , 2006, , .	0.4	5
18	Analysis of a Symmetric Terahertz Dielectric-Lined Rectangular Structure for High Gradient Acceleration. , 2009, , .		5

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19	Accelerated Bunch Stability in a Coaxial Dielectric Wakefield Structure When its Symmetry is Broken. AIP Conference Proceedings, 2010, , .	0.4	5
20	Microwave amplification in a coaxial slow-wave plasma transmission line. Plasma Physics Reports, 2001, 27, 480-489.	0.9	4
21	Broadband emission from a relativistic electron bunch in a semi-infinite waveguide. Technical Physics, 2002, 47, 227-234.	0.7	4
22	Effect of the ponderomotive force on the development of beam-plasma instability. Plasma Physics Reports, 2003, 29, 307-327.	0.9	4
23	Investigations of the concept of a multibunch dielectric wakefield accelerator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 829, 199-205.	1.6	4
24	Theory of wakefields excited by an off-axis drive bunch in a plasma dielectric waveguide. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2022, 1034, 166766.	1.6	4
25	Removal of asphalt-paraffin deposits in oil pipelines by a moving source of high-frequency electromagnetic radiation. Technical Physics, 2001, 46, 1069-1075.	0.7	3
26	A THz Coaxial Two-Channel Dielectric Wakefield Structure for High Gradient Acceleration. , 2010, , .		3
27	Influence of emittance on transverse dynamics of accelerated bunches in the plasma dielectric wakefield accelerator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 829, 121-124.	1.6	3
28	Generation of wakefields in a dielectric structure filled with plasma. Technical Physics, 2016, 61, 511-516.	0.7	3
29	Excitation of wakefields by relativistic electron bunches in the dielectric waveguide filled with radially inhomogeneous plasma. EPJ Web of Conferences, 2017, 149, 02011.	0.3	3
30	High-power coaxial microwave ubitron: Simulation by the particle-in-cell method. Technical Physics, 2005, 50, 747-753.	0.7	2
31	Wakefield Excitation by a Sequence of Electron Bunches in a Rectangular Waveguide Lined with Dielectric Slabs. AIP Conference Proceedings, 2006, , .	0.4	2
32	Excitation of broadband oscillations by electron beam in coaxial disk loaded transmission line. , 0, , .		1
33	Coaxial slowing down structure for hybrid UHF amplifier of range 1-3 GHz. , 0, , .		1
34	UHF method of elimination of the paraffin plug in oil well. , 1999, , .		1
35	Effect of the microwave ponderomotive force on the development of the beam instability at different plasma and beam parameters. Plasma Physics Reports, 2003, 29, 688-694.	0.9	1
36	Virtual anode as a source of low-frequency oscillations of a high-current electron beam. Technical Physics Letters, 2003, 29, 967-970.	0.7	1

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37	Amplitudes and Spectra of Wake Fields in a Planar Dielectric Resonator with Finite Q-Factor. AIP Conference Proceedings, 2006, , .	0.4	1
38	Excitation of wake fields by lengthy electron bunches in a dielectric resonator. Journal of Communications Technology and Electronics, 2009, 54, 1194-1200.	0.5	1
39	Nonlinear theory of wakefield excitation in a rectangular multizone dielectric resonator. Physical Review Special Topics: Accelerators and Beams, 2011, 14, .	1.8	1
40	Space-charge limited current of relativistic charged-particle beam in coaxial drift tube of finite length. , 2017, , .		1
41	Relativistic charged-particle beam limiting current in bounded coaxial drift tube. , 2017, , .		1
42	Multibunch Regime of Wakefield Excitation in a Plasma-Dielectric Structure. Ukrainian Journal of Physics, 2016, 61, 690-701.	0.2	1
43	Interaction of a modulated electron beam with a plasma. Radiophysics and Quantum Electronics, 1989, 32, 993-999.	0.5	0
44	Plasma nonlinearity influence on HF oscillation excitation by the electron beam in hybrid plasma waveguides. , 0, , .		0
45	Acceleration wake-field enhancement of excited by long relativistic electron bunch owing to self-modulation. , 0, , .		0
46	The spectrum broadening of excited oscillations in coaxial slowing structure when filling by plasma. , 0, , .		0
47	Electrodynamics of the plasma-filled inverted chain of coupled cavities. , 0, , .		0
48	Electrodynamics of coupled cavities chain, blown by e-beam. , 1999, , .		0
49	The exciting of the wake field in the dielectric waveguide. , 0, , .		0
50	Dielectric wake-field generator. , 0, , .		0
51	Beam-plasma amplifier on basis of coaxial transmission line. , 0, , .		0
52	The destruction of asphaltic-paraffin plugs in oil lines by means of a moving source of HF-radiation. , 2000, , .		0
53	The effect of the powerful nonstationary RF-radiation on paraffin plugs in the equipment of oil bores. , 2000, , .		0
54	Multi-mode wake-field excitation by sequence of relativistic electron bunches in dielectric waveguide. , 2000, , .		0

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55	Above plasma frequency radiation at intense beam-plasma interaction. , 0, , .		0
56	Short pulse generation in dielectric by a sequence of electron bunches. , 0, , .		0
57	Development of the numerical code for researching a virtual cathode in a group ion accelerator. , 0, , .		0
58	Influence of a finite length of a dielectric waveguide on the acceleration of electrons by wake fields of a train of bunches. , 0, , .		0
59	Virtual anode as a source of low-frequency oscillations of high-current electron beams. , 2003, , .		0
60	Theory of high power coaxial ubitron. , 2003, , .		0
61	Starting currents in coaxial gyro-BWO. , 2003, , .		0
62	Generation of intense slow waves of a space charge by IREB in periodic magnetic fields. , 2003, , .		0
63	Resonant Excitation of Selected Modes by a Train of Electron Bunches in a Rectangular Dielectric Wakefield Accelerator. , 0, , .		0
64	Nonlinear dynamics of multifrequency excitation mode in coaxial slow-wave transmission line. , 2005, , .		0
65	Amplitude-Frequency Characteristics of Multifrequency Signal Amplification in Coaxial Slow-Wave Transmission Line. , 2006, , .		0
66	The Nonlinear Mode Pic-Modelling of the Wake Field Excitation in the Cylindrical Resonator. , 2006, , .		0
67	Optimization of Wake Field Excitation in Cylindrical Resonator using the PIC Code Simulation. , 2007, , .		0
68	Excitation of Broadband Signals in Coaxial TWT. , 2007, , .		0
69	Formation of a periodic magnetic field by a sequence of rings with different magnetic and electric properties. Journal of Communications Technology and Electronics, 2007, 52, 835-841.	0.5	0
70	Limiting saturation levels of wake fields excited by lengthy electron bunches in the dielectric resonator. , 2008, , .		0
71	Two Channel Dielectric-Lined Rectangular High Transformer Ratio Accelerator Structure Experiment. , 2010, , .		0
72	Wakefield excitation in dielectric wavguides by a sequence of relativistic electron bunches. , 2014, , .		0

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73	Wakefield excitation in dielectric wavguides by a sequence of relativistic electron bunches. , 2014, , .		0
74	Transverse dynamics of accelerated bunches in a plasma-dielectric wakefields. , 2014, , .		0
75	Radiation of a wakefield excited by an electron bunch train in a section of dielectric waveguide. AIP Conference Proceedings, 2016, , .	0.4	0
76	High transformer ratio of multi-channel dielectric wakefield structures. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 829, 213-220.	1.6	0
77	A self-focusing, high transformer ratio, collinear plasma dielectric wakefield accelerator driven by a ramped bunch train. AIP Conference Proceedings, 2017, , .	0.4	0
78	A fast "kicker" using a two-channel rectangular dielectric wakefield accelerator structure. AIP Conference Proceedings, 2017, , .	0.4	0
79	Dielectric wakefield structure-based, nondestructive proton beam transverse position and profile monitor. AIP Conference Proceedings, 2017, , .	0.4	0
80	Amplification of the Multifrequency Signal in the Coaxial Slow-Wave Structure. Telecommunications and Radio Engineering (English Translation of Elektrosvyaz and Radiotekhnika), 2008, 67, 177-189.	0.4	0